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EXAMINER

CERULLO, JEREMY S

ART UNIT PAPER NUMBER

2112

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/801,561

Applicant(s)

AOYAMA, YOSHIMASA

Examiner

Jeremy S. Cerullo

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040317.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. Claims 1-9 are pending in the following action.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 5-9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0188076 ("Bronson" et al.).
4. As for Claim 1, Bronson discloses a device (Figures 2 and 3, Item 18) comprising a first bus (Figure 3, Item 36), which transfers a non-encrypted transaction containing an address (Bronson discloses that the bus is a PCI bus, which is commonly known in the art to transmit non-encrypted transactions containing address information). Bronson also discloses a second bus (Figure 2, Item 22) connected to an outside of the device. Bronson also discloses a bridge circuit (Figure 3, Item 34) connected between the first and second buses, the bridge circuit including a controller (Figure 3, Item 48) which determines whether an address contained in the transaction transferred through the first

bus falls within a particular address range, and which prevents the transaction from being transmitted to the second bus if the address falls within the particular range (Page 1, Paragraph [0010]; Page 3 Paragraphs [0036]-[0037]).

5. As for Claim 5, Bronson discloses that I/O adapter 18 is connected to secondary bus 22 via an expansion slot (Figure 2, Item 24; Page 2, Paragraph [0027]).

6. As for Claim 6, Bronson discloses that the first and second buses are PCI buses (Page 2, Paragraph [0027]).

7. As for Claim 7, Bronson discloses that I/O adapter 18 is connected to secondary bus 22 via a PCI expansion slot (Figure 2, Item 24; Page 2, Paragraph [0027]).

8. As for Claim 8, Bronson discloses a method for transaction control via a device (Figures 2 and 3, Item 18) comprising a first bus (Figure 3, Item 36), which transfers a non-encrypted transaction containing an address (Bronson discloses that the bus is a PCI bus, which is commonly known in the art to transmit non-encrypted transactions containing address information). Bronson also discloses a second bus (Figure 2, Item 22) connected to an outside of the device. Bronson also discloses a bridge circuit (Figure 3, Item 34) connected between the first and second buses, the bridge circuit including a controller (Figure 3, Item 48) which determines whether an address contained in the transaction transferred through the first bus falls within a particular address range, and which prevents the transaction from being transmitted to the second bus if the address falls within the particular range (Page 1, Paragraph [0010]; Page 3 Paragraphs [0036]-[0037]).

9. As for Claim 9, Bronson discloses that the controller that restricts transmission from the first bus to the second bus (as described in the rejection of Claim 1 above) also restricts the transactions from the second bus to the first bus in the same manner, by comparing the address from the transaction with an address range and preventing the transaction if the address falls within that range (Page 1, Paragraph [0010]; Page 3 Paragraphs [0036]-[0037]).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bronson as applied to Claim 1 above.

12. As for Claim 2, Bronson teaches all of the limitations inherited from Claim 1 (refer to rejection of Claim 1, above). While Bronson does not teach a separate controller that determines whether an address contained in a transaction transferred through the second bus falls within a second particular bus range, and which prevents the transaction from being transmitted to the first bus if the address falls within the second address range, Bronson does teach that the controller that restricts transmission from the first bus to the second bus (as described in the rejection of Claim 1 above) also

restricts the transactions from the second bus to the first bus in the same manner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated both of the controllers into a single component in order to simplify manufacture of the device by reducing the number of components.

13. As for Claim 3, Bronson teaches all of the limitations inherited from Claim 1 (refer to rejection of Claim 1, above). Bronson also teaches a storage that stores the address range (Figure 3, Item 46; Page 3, Paragraph [0038] – Page 4, Paragraph [0051]). Bronson also teaches a comparator that compares the address with the address range and a determination section which determines whether the transaction should be transmitted (Figure 3, Item 48; Page 3, Paragraphs [0036]-[0037]). And while Bronson does not expressly teach that the controller stores the address from the transaction, it would have been obvious to one of ordinary skill in the art at the time of the invention that in order to compare the address with the address range, the address would have to be stored somewhere in the controller, even if only temporarily.

14. As for Claim 4, Bronson teaches all of the limitations inherited from Claims 1 and 3 (refer to rejections of Claim 1 and 3, above). Bronson also teaches that the address range corresponds to an address space on a memory (Page 3, Paragraphs [0031]-[0037]).

### ***Conclusion***

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15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 5,689,726; U.S. Patent No. 5,913,045; U.S. Patent No. 6,260,094; U.S. Patent No. 6,816,938.

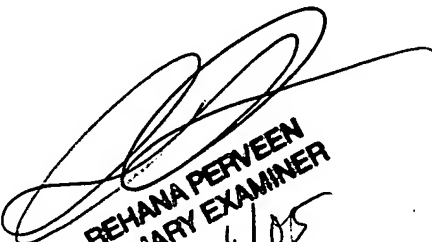
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy S. Cerullo whose telephone number is (571) 272-3634. The examiner can normally be reached on Monday - Thursday, 8:00-4:00; Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571) 272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JSC



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10/11/05